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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/520,606 | 01/06/2005 | Egbert Jan Van Riet | TS6331US | 9765 |

7590
Eugene R Montalvo
Shell Oil Company
Intellectual Property
PO Box 2463
Houston, TX 77252-2463

EXAMINER

BOMAR, THOMAS S

| | |
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| ART UNIT | PAPER NUMBER |
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3676

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| MAIL DATE | DELIVERY MODE |
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01/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/520,606 | Applicant(s) VAN RIET, EGBERT JAN | |
| | Examiner Shane Bomar | Art Unit 3676 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 2-7 and 9-12 is withdrawn in view of the newly discovered reference(s) to Claycomb. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 2-7 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,257,442 to Claycomb.

Regarding claims 2-6, Claycomb discloses a drilling system for drilling a well bore into an earth formation, comprising: drilling means for drilling a well bore with an inherent pumping means for pumping drilling fluid into the well bore during drilling (col. 1, lines 11-23); and a drilling fluid outlet system for retrieving drilling fluid from the well bore, said drilling fluid outlet system comprising a choke means (the upper and lower chokes at the far right side of Fig. 3) for choking the return flow of retrieved drilling fluid, and alternating means 122 for alternating the flow direction through the choking means (i.e., flow either goes through one choke, or the means is alternated so that flow goes through the other choke). The drilling fluid outlet system further comprises an accumulator 134, filters 102 and 118 are arranged in connection to the choke means, and an inlet and an outlet, wherein the choke means comprise a first inlet/outlet connection in the upper choke, a second outlet/inlet connection in the lower choke, and the alternating means connect the inlet alternatingly to the first or second connection

and the outlet alternatingly to the second or first connection and wherein the alternating means comprise a four way valve 122 (Fig. 3), having four connections connected two by two, and wherein the choking means comprise a bi-directional choke (i.e., each choke is capable of permitting flow therethrough in either direction; however, flow can be directed in one direction to one choke, or in another direction to the other choke; see col. 7, lines 13-63).

Regarding claim 7, the combination of the two chokes make up the choke means that is bi-directional (see immediately above), although each choke is used for unidirectional flow (Fig. 3).

Claim Rejections - 35 USC § 103

4. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claycomb.

Claycomb teaches a method of drilling a wellbore into an earth formation using the drilling system similar to that of claims 2-5 above. However, it is not specifically taught that when the flow direction through the choke means is alternated debris will be flushed away from the choke means. Nevertheless, it is noted that when the top choke is open to flow, the bottom choke is closed to flow (Fig. 3). When a predetermined pressure condition is met and it is desired to open and direct fluid flow through the closed choke, the other choke is then closed. It would be obvious to one of ordinary skill in the art that some drilling fluid will become trapped in the other choke as it closes, wherein said drilling fluid will also contain debris as is notoriously known in the art. This debris will then become trapped in the choke until such a time when the choke is opened again to flow therethrough. At such time, the new flow of drilling fluid will achieve the predictable result of flushing the debris that remained in the choke from the choke.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 2-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No.

11/769,540. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to substantially similar subject matter with only slightly different wording in each set of claims to convey the same meaning.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

7. The prior art made of record on form 892 and not relied upon is considered pertinent to applicant's disclosure.

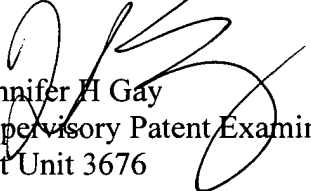
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or Canada) or 571-272-1000.


Jennifer H Gay
Supervisory Patent Examiner
Art Unit 3676

January 10, 2008

tsb